## AF-3 - Change Livestock Feed and Improve Productivity to Reduce Methane Emissions

Improved Ruminant Productivity programs increase the efficiency of dairy and beef cattle and other ruminant operations.<sup>6</sup>

## Benefit/Cost of Reducing CO<sub>2</sub>e:

The 2000 Utah Office of Energy and Resource Planning report indicated that according to industry estimates, methane emissions could be reduced by up to two percent per year if the above practices are employed. At this rate, 284,577 tons of CO<sub>2</sub> equivalents could be reduced by 2010 for a total of 1,271,105 tons emitted.<sup>7</sup>

## Assessment: Medium Priority. Bin B. 9 out of 22 votes.

If there are ways to shift feed rations that can impact methane emissions, then this is almost a "no brainer."

USU is researching this issue. Competitive pressures to increase efficiency will encourage the dairy and beef industries to adopt process changes. For example, production-enhancing technologies, such as recombinant bovine somatotropin (rBST), are being deployed that accelerate the rate of productivity improvement. rBST has been on the market for 13 years and has Food and Drug Administration approval. By increasing milk production per cow, methane emissions per unit of milk produced declines. Improving productivity within the cow-calf sector of the beef industry requires additional education and training. The importance and value of better nutritional management and supplementation must be communicated. Energy, protein, and mineral supplementation programs tailored for specific regions and conditions need to be developed to improve the implementation of these techniques. The special needs of small producers must also be identified and addressed. There may be some manure management/methane opportunities further into the future.

<sup>&</sup>lt;sup>6</sup> 2000 Utah Office of Energy and Resource Planning (OERP) report

<sup>&</sup>lt;sup>7</sup> 2000 Utah Office of Energy and Resource Planning (OERP) report

<sup>&</sup>lt;sup>8</sup> Circle Four Farms in Milford is currently looking into this.